

**Table 4.1 Technically Recoverable Petroleum Resource Estimates, January 1, 1999**

Region	Crude Oil <sup>1</sup> (million barrels)			Natural Gas Liquids (million barrels)			Natural Gas (Dry) (billion cubic feet)		
	Alaska	Lower 48 States	United States	Alaska	Lower 48 States	United States	Alaska	Lower 48 States	United States
<b>Discovered <sup>2</sup></b>									
Reserve Growth (Conventional; Onshore) .....	<sup>3</sup> 13,000	447,000	<b>60,000</b>	500	12,900	<b>13,400</b>	32,000	290,000	<b>322,000</b>
Reserve Growth (Conventional; Federal Offshore) .....	0	<sup>5</sup> 2,238	<b>2,238</b>	NE	NE	<b>NE</b>	0	<sup>5</sup> 32,719	<b>32,719</b>
Unproved Reserves (Conventional; Onshore) .....	NA	10,256	<b>10,256</b>	NA	2,273	<b>2,273</b>	NA	86,395	<b>86,395</b>
Unproved Reserves (Federal Offshore) .....	400	1,643	<b>2,043</b>	NE	NE	<b>NE</b>	700	4,436	<b>5,136</b>
<b>Undiscovered, Technically Recoverable <sup>2</sup></b>									
Conventional (Onshore) .....	8,440	21,810	<b>30,250</b>	1,120	6,080	<b>7,200</b>	68,410	190,280	<b>258,690</b>
Conventional (Federal Offshore) .....	24,300	21,300	<b>45,600</b>	( <sup>6</sup> )	<sup>6</sup> 1,800	<b>1,800</b>	125,900	142,100	<b>268,000</b>
Continuous-type (in Sandstone, Shales and Chalks; Onshore) .....	NE	2,066	<b>2,066</b>	NE	2,119	<b>2,119</b>	NE	308,080	<b>308,080</b>
Continuous-type (in Coal Beds; Onshore) .....	NA	NA	<b>NA</b>	NA	NA	<b>NA</b>	NE	49,910	<b>49,910</b>
<b>Total</b> .....	<b>46,140</b>	<b>106,313</b>	<b>152,453</b>	<b>NA</b>	<b>NA</b>	<b>26,792</b>	<b>227,010</b>	<b>1,103,920</b>	<b>1,330,930</b>

<sup>1</sup> Condensate is included with crude oil for Minerals Management Service (MMS) estimates in Federal Offshore regions.

<sup>2</sup> Excludes "proved reserves," which are more certain than the resource estimates shown in this table.

<sup>3</sup> Using U.S. Geological Survey (USGS) definition, 952 million barrels of indicated additional oil reserves were included (Energy Information Administration (EIA), year end 1996).

<sup>4</sup> Using USGS definition, 1,924 million barrels of indicated additional oil reserves were included (EIA, year end 1996)

<sup>5</sup> Reserve growth in the Pacific Federal offshore is not included. It was not estimated by MMS.

<sup>6</sup> Alaska is included in Lower 48 States.

NA=Not available. NE= Not estimated.

Notes: • See Note 1 at end of section. • The category Unproved Reserves (Conventional; Onshore) is the result of low oil prices that caused temporary de-booking of formerly proved reserves in 1998. • Onshore indicates estimates for all Onshore plus State Offshore waters (near-shore, shallow-water areas under State jurisdiction). • Federal Offshore denotes MMS estimates for Federal Offshore jurisdictions (the

Outer Continental Shelf and deeper water areas seaward of the State Offshore jurisdictional boundary).

• The USGS mean estimates are as of year-end 1993 (onshore and State offshore). The MMS mean estimates are as of year-end 1994. Probable and possible reserves are considered by the USGS to be part of reserve growth but are separately estimated by MMS as unproved reserves. USGS did not set a time limit for the duration of reserves growth; MMS set the year 2020 as the time limit in its estimates of reserve growth in existing fields in the Gulf of Mexico. Excluded from these resource estimates are undiscovered oil resources in tar deposits and oil shales, and undiscovered gas resources in geopressured brines and gas hydrates. • Data may not sum to totals due to independent rounding.

Sources: **Federal Offshore:** U.S. Department of the Interior, Minerals Management Service. *An Assessment of the Undiscovered Hydrocarbon Potential of the Nation's Outer Continental Shelf* (1996), OCS Report MMS 96-0034. **Onshore:** U.S. Department of the Interior, U.S. Geological Survey (USGS), *1995 National Assessment of United States Oil and Gas Resources*, USGS Circular 1118. **Unproved Reserves (Conventional; Onshore):** Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report 1998* (December 1999), Table G1.